

HiggsBounds [1–5] version 5.2.0beta uses the following experimental analyses: [6–86] .

Internally, **HiggsBounds** uses a number of Standard Model results for the Higgs sector [87–122] to convert between experimental limits with different normalisations.

References

- [1] P. Bechtle et al., Comput. Phys. Commun. 181 (2010) 138, [arXiv:0811.4169](#).
- [2] P. Bechtle et al., Comput. Phys. Commun. 182 (2011) 2605, [arXiv:1102.1898](#).
- [3] P. Bechtle et al., PoS CHARGED2012 (2012) 024, [arXiv:1301.2345](#).
- [4] P. Bechtle et al., Eur. Phys. J. C74 (2014) 2693, [arXiv:1311.0055](#).
- [5] P. Bechtle et al., (2015), [arXiv:1507.06706](#).
- [6] ATLAS, G. Aad, Phys. Rev. Lett. 108 (2012) 111802, [arXiv:1112.2577](#).
- [7] D0, V.M. Abazov et al., Phys. Lett. B671 (2009) 349, [arXiv:0806.0611](#).
- [8] Tevatron New Physics Higgs Working Group, C. Group, D. Collaborations and . the Tevatron New Physics an, (2012), [arXiv:1207.0449](#).
- [9] CDF, T. Aaltonen et al., Phys. Rev. Lett. 102 (2009) 021802, [arXiv:0809.3930](#).
- [10] D0, V.M. Abazov et al., Phys. Rev. Lett. 102 (2009) 231801, [arXiv:0901.1887](#).
- [11] CMS, . , (2016), [arXiv:1603.06896](#).
- [12] CDF, D. Benjamin et al., (2011), [arXiv:1108.3331](#).
- [13] ATLAS, . and others, Phys. Rev. Lett. 107 (2011) 221802, [arXiv:1109.3357](#).
- [14] ATLAS, G. Aad, Phys. Lett. B710 (2012) 49, [arXiv:1202.1408](#).
- [15] ATLAS, M. Aaboud et al., Eur. Phys. J. C78 (2018) 293, [arXiv:1712.06386](#).
- [16] Tevatron New Phenomena and Higgs Working Group, D. Benjamin et al., (2010), [arXiv:1003.3363](#).
- [17] D0, V.M. Abazov et al., Phys. Lett. B698 (2011) 6, [arXiv:1012.0874](#).

- [18] CMS, S. Chatrchyan, JHEP 03 (2012) 040, [arXiv:1202.3478](#).
- [19] CMS, . , (2015), [arXiv:1504.00936](#).
- [20] ATLAS, . , Physics Letters B744 (2015) 163, [arXiv:1502.04478](#).
- [21] ATLAS, . , (2015), [arXiv:1509.05051](#).
- [22] ATLAS, . , Eur. Phys. J. C76 (2016) 45, [arXiv:1507.05930](#).
- [23] D0, V.M. Abazov et al., Phys. Lett. B698 (2011) 97, [arXiv:1011.1931](#).
- [24] CMS, . , Phys. Lett. B752 (2016) 146, [arXiv:1506.00424](#).
- [25] ATLAS, . , (2015), [arXiv:1503.04233](#).
- [26] D0, V.M. Abazov et al., Phys. Rev. Lett. 105 (2010) 251801, [arXiv:1008.3564](#).
- [27] DELPHI, J. Abdallah et al., Eur. Phys. J. C34 (2004) 399, [hep-ex/0404012](#).
- [28] ATLAS, G. Aad, Phys. Lett. B707 (2012) 27, [arXiv:1108.5064](#).
- [29] ATLAS, M. Aaboud et al., Eur. Phys. J. C78 (2018) 24, [arXiv:1710.01123](#).
- [30] ATLAS, . , JHEP01 (2016) 032, [arXiv:1509.00389](#).
- [31] CMS, S. Chatrchyan, JHEP 04 (2012) 036, [arXiv:1202.1416](#).
- [32] L3, P. Achard et al., Phys. Lett. B609 (2005) 35, [hep-ex/0501033](#).
- [33] CMS, V. Khachatryan et al., JHEP 10 (2017) 076, [arXiv:1701.02032](#).
- [34] CMS, . , JHEP11 (2015) 071, [arXiv:1506.08329](#).
- [35] D0, V.M. Abazov et al., Phys. Rev. Lett. 103 (2009) 061801, [arXiv:0905.3381](#).
- [36] D0, V.M. Abazov et al., Phys. Rev. Lett. 104 (2010) 061804, [arXiv:1001.4481](#).
- [37] ATLAS, M. Aaboud et al., JHEP 01 (2018) 055, [arXiv:1709.07242](#).
- [38] ATLAS, . , (2014), [arXiv:1402.3244](#).
- [39] ATLAS, . , (2014), [arXiv:1409.6064](#).
- [40] ATLAS, . , (2015), [arXiv:1509.04670](#).
- [41] D0, V.M. Abazov et al., Phys. Lett. B682 (2009) 278, [arXiv:0908.1811](#).

- [42] DELPHI, J. Abdallah et al., Eur. Phys. J. C38 (2004) 1, [hep-ex/0410017](#).
- [43] ATLAS, G. Aad, Phys. Rev. Lett. 108 (2012) 111803, [arXiv:1202.1414](#).
- [44] CDF, T. Aaltonen et al., Phys. Rev. Lett. 104 (2010) 061803, [arXiv:1001.4468](#).
- [45] ATLAS, G. Aad, JHEP 06 (2012) 039, [arXiv:1204.2760](#).
- [46] CDF, T. Aaltonen et al., Phys. Rev. Lett. 103 (2009) 101802, [arXiv:0906.5613](#).
- [47] ATLAS, Phys. Lett. B716 (2012) 1, [arXiv:1207.7214](#).
- [48] OPAL, G. Abbiendi et al., Eur. Phys. J. C72 (2012) 2076, [arXiv:0812.0267](#).
- [49] CDF, T. Aaltonen et al., Phys. Rev. Lett. 109 (2012) 071804, [arXiv:1207.6436](#).
- [50] OPAL, G. Abbiendi et al., Phys. Lett. B682 (2010) 381, [arXiv:0707.0373](#).
- [51] CMS, . , Phys. Lett. B759 (2016) 369, [arXiv:1603.02991](#).
- [52] ATLAS, . , Phys. Lett. B732 (2014) 8, [arXiv:1402.3051](#).
- [53] LEP Higgs Working for Higgs boson searches, (2001), [hep-ex/0107032](#).
- [54] ALEPH, S. Schael et al., Eur. Phys. J. C47 (2006) 547, [hep-ex/0602042](#).
- [55] OPAL, G. Abbiendi et al., Eur. Phys. J. C23 (2002) 397, [hep-ex/0111010](#).
- [56] D0, V.M. Abazov et al., Phys. Lett. B707 (2012) 323, [arXiv:1106.4555](#).
- [57] CMS, . , Phys. Lett. B749 (2015) 560, [arXiv:1503.04114](#).
- [58] LEP Higgs Working Group for Higgs boson searches, (2001), [hep-ex/0107031](#).
- [59] ATLAS, . , (2014), [arXiv:1407.6583](#).
- [60] CMS, . , Eur. Phys. J. C74 (2014) 2980, [arXiv:1404.1344](#).
- [61] DELPHI, J. Abdallah et al., Eur. Phys. J. C32 (2004) 475, [hep-ex/0401022](#).
- [62] CMS, . , JHEP01 (2016) 079, [arXiv:1510.06534](#).
- [63] ALEPH, G. Abbiendi et al., (2013), [arXiv:1301.6065](#).

- [64] ATLAS, . , Physics Letters B738 (2014) 68, [arXiv:1406.7663](#).
- [65] ATLAS, M. Aaboud et al., Submitted to: JHEP (2018), [arXiv:1807.07915](#).
- [66] D0, V.M. Abazov et al., Phys. Rev. Lett. 107 (2011) 121801, [arXiv:1106.4885](#).
- [67] CMS, . , Phys. Lett. B748 (2015) 221, [arXiv:1504.04710](#).
- [68] ATLAS, G. Aad et al., Phys. Lett. B710 (2012) 383, [arXiv:1202.1415](#).
- [69] LEP Higgs Working Group for Higgs boson searches, (2001), [hep-ex/0107034](#).
- [70] ATLAS, . , (2014), [arXiv:1406.5053](#).
- [71] CDF, T. Aaltonen et al., Phys. Rev. D85 (2012) 032005, [arXiv:1106.4782](#).
- [72] CMS, . , Phys. Lett. B755 (2016) 217, [arXiv:1510.01181](#).
- [73] D0, V.M. Abazov et al., Phys. Rev. D84 (2011) 092002, [arXiv:1107.1268](#).
- [74] CMS, S. Chatrchyan, Phys. Rev. Lett. 108 (2012) 111804, [arXiv:1202.1997](#).
- [75] TEVNPH Working Group, . and others, (2011), [arXiv:1107.4960](#).
- [76] CMS, . , Phys. Lett. B726 (2013) 587, [arXiv:1307.5515](#).
- [77] OPAL, G. Abbiendi et al., Eur. Phys. J. C27 (2003) 311, [hep-ex/0206022](#).
- [78] CDF, T. Aaltonen et al., Phys. Rev. Lett. 103 (2009) 201801, [arXiv:0906.1014](#).
- [79] CDF, T. Aaltonen et al., Phys. Rev. Lett. 103 (2009) 101803, [arXiv:0907.1269](#).
- [80] CMS, S. Chatrchyan, Phys. Lett. B710 (2012) 26, [arXiv:1202.1488](#).
- [81] CMS, . , Phys. Lett. B750 (2015) 494, [arXiv:1506.02301](#).
- [82] CDF, CDF Notes 10500 10799 10573 8353 9999 10796 7307 10574 10485 7712 10010 10439 10599 10798.
- [83] D0, D0 Notes 6304 6305 6296 5873 6302 5739 6299 6227 6083 6295 6276 5845 6301 6183 6171 6286 6309 5757.
- [84] CMS, CMS Physics Analysis Summaries.

- [85] ATLAS, ATLAS CONF Notes 2012-160 2016-062 2016-089 2016-049
2012-135 2013-013 2012-161 2016-004 2016-059 2014-049 2016-074
2014-050 2012-092 2012-078 2016-088 2012-016 2012-019 2016-044
2016-071 2012-168 2011-094 2013-010 2016-055 2011-157 2016-056
2012-012 2013-030 2016-015 2016-079 2012-017 2016-082.
- [86] LHWG, LHWG Notes 2002-02.
- [87] A. Djouadi, J. Kalinowski and M. Spira, Comput. Phys. Commun. 108
(1998) 56, [hep-ph/9704448](#).
- [88] S. Catani, D. de Florian and M. Grazzini, JHEP 05 (2001) 025,
[hep-ph/0102227](#).
- [89] R.V. Harlander and W.B. Kilgore, Phys. Rev. D64 (2001) 013015,
[hep-ph/0102241](#).
- [90] R.V. Harlander and W.B. Kilgore, Phys. Rev. Lett. 88 (2002) 201801,
[hep-ph/0201206](#).
- [91] C. Anastasiou and K. Melnikov, Nucl. Phys. B646 (2002) 220,
[hep-ph/0207004](#).
- [92] V. Ravindran, J. Smith and W.L. van Neerven, Nucl. Phys. B665 (2003)
325, [hep-ph/0302135](#).
- [93] C. Anastasiou, R. Boughezal and F. Petriello, JHEP 04 (2009) 003,
[arXiv:0811.3458](#).
- [94] S. Dawson, Nucl. Phys. B359 (1991) 283.
- [95] A. Djouadi, M. Spira and P.M. Zerwas, Phys. Lett. B264 (1991) 440.
- [96] M. Spira et al., Nucl. Phys. B453 (1995) 17, [hep-ph/9504378](#).
- [97] U. Aglietti et al., Phys. Lett. B595 (2004) 432, [hep-ph/0404071](#).
- [98] G. Degrandi and F. Maltoni, Phys. Lett. B600 (2004) 255,
[hep-ph/0407249](#).
- [99] S. Actis et al., Phys. Lett. B670 (2008) 12, [arXiv:0809.1301](#).
- [100] S. Actis et al., Nucl. Phys. B811 (2009) 182, [arXiv:0809.3667](#).
- [101] S. Catani et al., JHEP 07 (2003) 028, [hep-ph/0306211](#).
- [102] D. de Florian and M. Grazzini, Phys. Lett. B674 (2009) 291,
[arXiv:0901.2427](#).
- [103] O. Brein, A. Djouadi and R. Harlander, Phys. Lett. B579 (2004) 149,
[hep-ph/0307206](#).

- [104] M.L. Ciccolini, S. Dittmaier and M. Kramer, Phys. Rev. D68 (2003) 073003, [hep-ph/0306234](#).
- [105] Higgs Working Group, K.A. Assamagan et al., (2004), [hep-ph/0406152](#).
- [106] R.V. Harlander and W.B. Kilgore, Phys. Rev. D68 (2003) 013001, [hep-ph/0304035](#).
- [107] T. Han, G. Valencia and S. Willenbrock, Phys. Rev. Lett. 69 (1992) 3274, [hep-ph/9206246](#).
- [108] J.M. Campbell and R.K. Ellis, Phys. Rev. D60 (1999) 113006, [hep-ph/9905386](#).
- [109] T. Figy, C. Oleari and D. Zeppenfeld, Phys. Rev. D68 (2003) 073005, [hep-ph/0306109](#).
- [110] E.L. Berger and J.M. Campbell, Phys. Rev. D70 (2004) 073011, [hep-ph/0403194](#).
- [111] U. Aglietti et al., (2006), [hep-ph/0612172](#).
- [112] W. Beenakker et al., Phys. Rev. Lett. 87 (2001) 201805, [hep-ph/0107081](#).
- [113] L. Reina and S. Dawson, Phys. Rev. Lett. 87 (2001) 201804, [hep-ph/0107101](#).
- [114] S. Dawson et al., Phys. Rev. D67 (2003) 071503, [hep-ph/0211438](#).
- [115] O. Brein and W. Hollik, Phys. Rev. D68 (2003) 095006, [hep-ph/0305321](#).
- [116] O. Brein and W. Hollik, Phys. Rev. D76 (2007) 035002, [arXiv:0705.2744](#).
- [117] M. Ciccolini, A. Denner and S. Dittmaier, Phys. Rev. Lett. 99 (2007) 161803, [arXiv:0707.0381](#).
- [118] M. Ciccolini, A. Denner and S. Dittmaier, Phys. Rev. D77 (2008) 013002, [arXiv:0710.4749](#).
- [119] LHC Higgs Cross Section Working Group, S. Dittmaier et al., (2011), [arXiv:1101.0593](#).
- [120] S. Dittmaier et al., (2012), [arXiv:1201.3084](#).
- [121] T.L.H.C.S.W. Group et al., (2013), [arXiv:1307.1347](#).
- [122] LHC Higgs Cross Section Working Group, D. de Florian et al., (2016), [arXiv:1610.07922](#).